# Implementation Plan for Linking the California Standards Tests and the Golden State Examinations as Required by SB 233 (2001)

#### First Draft

#### **Timeline for Implementation of Linked Tests**

Issue: The language of SB 233 requires a study of the psychometric qualities of the Golden State Examinations to be completed by December 15, 2003. Implicit in this legislative requirement is that the linkage between the CST's and GSE's be completed prior to that date and that the spring 2003 testing would include the first live administration of the linked tests--so that the potential use of the newly coordinated test results can be evaluated for use by institutions of higher education.

The workload requirements for completing this process by 2003 are overwhelming. Ten current CSTs and GSEs are to be linked, with these goals: avoiding redundancy in test coverage (coordinating test blueprints), reducing testing time, coordinating test administration, ensuring that the combined test results meet high standards of psychometric quality, and establishing the usefulness of the test results for higher education.

Linking the CST's and the GSE's as described in the statute could be competed by spring 2003, but only with incredibly intensive efforts and by shortening the appropriate test development and coordination processes, raising serious concerns about the quality of the tests produced. The CDE does not recommend attempting to complete this process for all GSE test results (including the linkage of ten pairs of CST's and GSE's) in the one year available to us before the spring 2003 tests go to the printer (in November or December of 2002).

**Phase-In Proposal:** CDE proposes that the linkage between the CST's and GSE's be phased in over a three year period (see following Phase-In Plan) to ensure the systematic quality control of the process and to support the appropriate evaluative studies.

But—if we do not complete the coordination of all related CST's and GSE's for live test administration in spring 2003, the coordinated CST's and GSE's and the test results from them will not yet be available for evaluation in their final form.

**Evaluation meeting Statutory Requirements**: CDE proposes that the evaluation study be ongoing. Preliminary and interim reports would be produced along the way (such as the reports done by the evaluator of the High School Exit Examination), evaluating the quality of the process as the coordination of the tests proceeds and as the appropriate analytic studies are completed. The complete evaluation of the GSE results would follow as the CST's and GSE's are fully coordinated and as information about the predictive validity of the test results is gathered.

#### Phase-In Plan for Linking CST's and GSE's and Enhancing the Psychometric Qualities of the Golden State Examination Results

To best ensure the quality of the results of this process, CDE is proposing that the work described in SB233 be completed in three phases:

**Phase I: Spring 2003 Administration**--Linking the Grade 11 English language arts assessments (CST and GSE) and the mathematics tests covering comprehensive achievement in high school mathematics (CST and GSE) (typically given to grade 11 students and covering algebra I, geometry, algebra II, and probability and statistics).

These tests would be the first to produce the linked results, using coordinated test blueprints. Results of these tests would be available following initial administration in spring 2003, and would be the first to provide results for the psychometric evaluation described in SB 233. The GSEs in phases two and three would reach this "linkage" point in the following two years.

**Phase II: Spring 2004 Administration**—Linking the CST's and GSE's in key subjects used for potential scholarships for higher education and required to qualify for the Golden State Diploma.

These tests, fully linked for spring 2004 testing, would include CST's and GSE's in Algebra I, Geometry, Biology, Chemistry, and US History. These test will undergo continuing evaluation of their development and the quality of their results, and will be fully coordinated for the spring 2004 test administration.

**Phase III: Spring 2005 Administration**—Linking the remaining CST's and GSE's, and expanding independent GSE's to meet the required psychometric quality levels. These tests would include the tests in Physics, Second-year Coordinated Science, Government/Civics, Economics, Second-year Spanish Language and any other tests identified as appropriate for new development, such as GSE's in World History (grade 10) or Algebra II, where there are already CST's in place.

All of the GSE results from the linked CST's and GSE's would be under ongoing evaluation to ensure the highest levels of psychometric quality and their value for use by institutions of higher education. Some of these evaluations can be reported as the process moves forward, meeting the statutory requirement; others will take a number of years to complete, particularly those that will verify the predictive validity of the test results by linking student success on these tests with subsequent student success in college.

# Phase I Implementation Timeline

# **Process for Preparing Grade 11 ELA and Mathematics Tests for Administration in Spring 2003 and Analyzing the Results**

(If all GSE results must go through this process by spring 2003, the effort will go well beyond current capacity for a successful and technically sound outcome.)

**November 2001** Ongoing meetings of ICC Working Group on Assessment,

focusing on the coordination of the English language arts and mathematics CST's and GSE's for students in Grade 11. Ongoing meetings of ICC-sponsored content and technical committees to complete coordinated test designs and development processes.

**February 2002** Completion of coordinated test design and item development

specifications, including field test designs and planned technical

analyses.

Review of design plans and item development processes by full CST Content Review Panels, full GSE Development Teams, representatives of institutions of higher education, CDE Expert Panel on Assessment, State Board members, CDE Staff, and independent evaluation contractors.

Consideration of all comments and consensus agreement on design and development processes at the ICC Working Group on

Assessment.

**April 2002** Field testing of new items begins (field testing continues until

October)

June 2002 Analysis of field test results begins (analyses continue through

December)

**September 2002** Forms construction for 2003 coordinated tests begins (completed

by November 1)

**November 2002** Forms construction for 2003 coordinated tests completed and

approval sent to contractors

**April 2003** STAR test administration--linked GSE component administered as

augmentation to STAR test administration (using single student number and header sheet, with separate booklet for components

needing hand scoring)

July 2003 Last STAR testing completed

October 2003 GSE results, combining CST and GSE components, compiled and

reported to students by October 1, 2003

**December 15, 2003** Initial analyses and psychometric evaluation of GSE results

completed

2004-2005 Ongoing evaluation of Grade 11 GSE results, including continuing

analyses of test characteristics, improvements in test design, and

studies of the predictive validity of test results for use by

institutions of higher education

### **Logistical Issues**

Some key administrative concerns are:

- 1) Timing the administration of the GSE to coincide with the administration of the related CST, including coordination of the test booklets, with linked student identification numbers across both test components. This coordination is complicated by the voluntary nature of participation in the GSE, and the need for performance tasks to be separated for scoring at the appropriate scoring sites. CDE must also coordinate the work of the STAR and GSE contractors to ensure that the linking processes are completed effectively.
- 2) Technical and logistical solutions for combining scores must be established by the Fall of 2002 to produce linked GSE results from the Spring 2003 test administration.
- 3) High school seniors enrolled in courses for which there are linked tests must have access to these tests so that they can receive a GSE score to qualify for admissions, placement, scholarships, and honors recognition.

## **Administrative Structure for Coordinating CST and GSE Test Results for Use by Higher Education**

Although the primary administrative responsibility for these tests, and their capacity to meet all of the purposes identified in statute, falls to the staff of the CDE, success in using GSE test results by institutions of higher education involves the coordinated efforts of representatives of the University of California, the California State University System, the California Community Colleges, the California Department of Education, and the California State Board of Education. Without the support and involvement of all interested parties in the process, and the full endorsement of the results, the project cannot succeed.

With the goal of reaching consensus on this plan and the engagement of all segments in this work, CDE staff proposes the following administrative structure for the project:

- 1) Organize the general planning and oversight of the process by utilizing the current structure of the Intersegmental Coordinating Council Working Group on Assessment, adding the two members designated by the State Board to the group.
- 2) This working group will attempt to reach consensus among the member institutions, and its members are ultimately advisory to their own institutions—the CDE, SBE, UC, CSU, and CCC. The CDE bears the primary responsibility and authority for the successful completion of the tasks identified in statute.
- 3) The Working Group will be assisted by content area committees and a technical advisory committee, subordinate to the ICC Working Group on Assessment and including designated representatives of each of the institutions listed above. These High School Test Coordination and Item Review Committees in English Language Arts, Mathematics, History-Social Science, and Science will focus on the tasks related to coordinating test coverage across CST's and GSE's and ensuring the quality of test items, test forms, and test results. These content area committees will include members of the content review panels for the California Standards Tests and the test development teams for the Golden State Examinations.
- 4) The technical advisory group will assist the ICC Working Group in resolving the design and logistical issues associated with the linking of the CST's and GSE's, will assist in establishment of technical criteria for item and test development, including field testing and test form construction, and provide for the appropriate technical analyses to be completed throughout the testing process, including analyses supporting the potential use of the test results by institutions of higher education.
- 5) These committees (described in 3 and 4 above) will report to the ICC Working Group on Assessment, and the members of the Working Group will report to their respective institutions. The coordinated, intersegmental content and technical

committees will provide guidance to the CDE and its contractors in the implementation of this plan to link the CST's and GSE's—to provide GSE test results that meet high standards of psychometric excellence and serve the needs of institutions of higher education.

6) Insofar as it is possible, the institutions listed above will designate members to work on the item development teams for the California Standards Tests and the Golden State Examinations.